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Attorneys for Plaintiff

UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA, SAN JOSE DIVISION

GSI TECHNOLOGY, INC., a Delaware  
 Corporation,

Plaintiff,

v.

UNITED MEMORIES, INC., a Colorado  
 Corporation,

Defendant.

CASE NO. 13-CV-1081-PSG

**DECLARATION OF LEE-LEAN SHU IN  
 SUPPORT OF GSI TECHNOLOGY, INC.'S  
 EX PARTE APPLICATION FOR (1)  
 TEMPORARY RESTRAINING ORDER;  
 (2) ORDER TO SHOW CAUSE  
 REGARDING PRELIMINARY  
 INJUNCTION; AND (3) EXPEDITED  
 DISCOVERY IN THE ALTERNATIVE**

Date: March 26, 2013

Time: Ex Parte

Judge: Ex Parte

I, Lee-Lean Shu, declare and state as follows:

1. I am Chief Executive Officer and President of GSI Technology, Inc. ("GSI Tech"), the Plaintiff in this matter. I make this declaration in support of GSI Tech's Ex Parte Application for Temporary Restraining Order; Order to Show Cause Regarding Preliminary Injunction; and Expedited Discovery. I have personal knowledge of each of the facts set forth in this declaration and if required, could and would competently testify thereto.

1           2.       GSI Tech designs, develops, and markets a broad range of high performance  
2 memory products for networking, military, medical, automotive, and other applications. It  
3 specializes in memory products featuring very high transaction rates, high density, low latency,  
4 high bandwidth, fast clock access times, and low power consumption.

5           3.       As more particularly described in the Declaration of Didier Lasserre, filed in  
6 connection with the present application for Temporary Restraining Order (“Lasserre  
7 Declaration”), in approximately July 2007, GSI Tech and another chip maker was selected by a  
8 router manufacturer (the “Customer”) to design, develop, and manufacture a “low latency / high  
9 random address rate” Dynamic Random Access Memory chip (a “LLDRAM Product”). This  
10 particular LLDRAM Product was a “Type III” LLDRAM Product.

11           4.       After the specifications for the Customer’s Type III LLDRAM Product were  
12 determined, GSI Tech engaged Defendant United Memories, Inc. (“UMI”) to provide design and  
13 development services for a different class of LLDRAM Product. This new product was a  
14 LLDRAM Type II versus the LLDRAM Type III, which was defined and intended for the  
15 Customer.

16           5.       Because UMI lacked experience with LLDRAM technology, and because the  
17 process technology then available to GSI Tech and UMI was not sufficiently advanced to begin  
18 the design of the LLDRAM Type III Product, we engaged UMI in the project to design the less  
19 sophisticated Type II chip for the benefit of the knowledge and experience that would be gained  
20 in the project. We believed that, by first beginning with the Type II Product, UMI would gain  
21 valuable knowledge and experience in LLDRAM design that could later be applied to the  
22 LLDRAM Type III Project for the benefit of GSI Tech.

23           6.       UMI, through John Faue and Robert Gower, promoted itself as particularly  
24 appropriate for the project based on its affiliation with its parent company, ProMOS. ProMOS  
25 operated one of a handful of “fabs,” a factory where integrated circuits can be manufactured and  
26 tested. Having access to a fab was essential to the success of the project, both for the testing  
27 phase of the prototype chip and the ultimate manufacture of the LLDRAM Product for sale to the  
28 Customer. Mr. Faue and Mr. Gower claimed that UMI could leverage its experience with its

1 parent company to efficiently and effectively complete the project.

2 7. GSI Tech and UMI ultimately entered into a “UMI-GSI Product Design and  
3 Development Agreement” (the “Agreement”). Attached to the Complaint as Exhibit A is a true  
4 and correct copy of the Agreement.

5 8. UMI began work on the LLD RAM Type II Product in approximately May 2008.

6 9. As noted above, GSI Tech had selected UMI for this work, in part, because of its  
7 relationship with ProMOS and the availability of ProMOS’s fab. Because each fab where DRAM  
8 chips are made develops and observes different design rules and manufacturing process, chip  
9 designers must select a specific fab to manufacture the chips under development. That is, in  
10 developing the design of the chip, it must be tailored to the unique manufacturing process  
11 observed by the manufacturing fab. And if the selected fab becomes unavailable, the design work  
12 must be redone to conform to the design rules and manufacturing process of the replacement fab  
13 unless the replacement fab uses the same manufacturing process and design rules as the original  
14 fab.

15 10. As UMI began development work, UMI and GSI Tech understood that the  
16 LLD RAM chips would be manufactured at the ProMOS fab owned by UMI’s parent company,  
17 where UMI’s design experience was. UMI therefore designed the LLD RAM chip for  
18 manufacture at ProMOS.

19 11. Prior to its involvement in this project, UMI had no experience in designing any  
20 LLD RAM device, much less the specific LLD RAM Product for which it was engaged by GSI  
21 Tech. Rather, its experience lay in designing standard DRAM, which had become a  
22 commoditized, undifferentiated market by 2008. The LLD RAM market, by contrast, was a very  
23 small and highly specialized segment of the DRAM market, as it remains today, with relatively  
24 few manufacturers or suppliers. The LLD RAM market was and is a small market because, while  
25 LLD RAM enjoys higher performance characteristics than DRAM, that performance comes with a  
26 higher price as well.

27 12. When GSI Tech engaged with UMI, we were concerned that UMI would be  
28 exposed to our confidential, proprietary, and trade secret information and know-how concerning

1 LDRAM technology. We understood that UMI had no previous experience with such chips.  
2 And we were concerned that, as a contract manufacturer, it might exploit the knowledge that it  
3 gained through working with us for its own advantage and to the benefit of our competitors. For  
4 that reason, included in the Agreement were several protections intended to allay this concern.

5 13. In order to facilitate design of the LDRAM Product, and considering that UMI  
6 had no prior history with LDRAM products, GSI Tech sent UMI one of its engineers, Ramaa  
7 Iyer to perform simulation and circuit verification for two months, significantly advancing UMI's  
8 LDRAM capability. Although we relied upon UMI to perform the design, Ms. Iyer was sent to  
9 UMI to assist in verifying the designing and to build a circuit verification model for post-silicon  
10 verification. GSI Tech considered the information shared by its engineer with UMI to be non-  
11 public, sensitive business information and would have expected UMI to treat it as confidential, as  
12 required by the Contract, and not to be used by UMI or shared with others except as necessary to  
13 perform its responsibilities under the Contract.

14 14. I, David Chapman, Vice President of Marketing, Paul Chiang, Vice President of  
15 DRAM Design, and Ramaa Iyer, DRAM design engineer, also participated in chip design review  
16 meetings and suggested critical improvements and corrections to UMI's circuitry design. For  
17 example, during a December 18, 2008 design review meeting attended by GSI Tech and UMI  
18 engineers and executives, I noted a design flaw in the boundary scan design. I suggested an  
19 alternate design to avoid the problem, which was then implemented by UMI. These  
20 improvements and other feedback provided by myself and other GSI Tech representatives during  
21 these review meetings constituted confidential, proprietary, and non-public information that could  
22 not be used by UMI or shared with others.

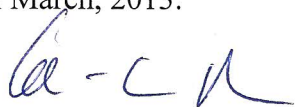
23 15. GSI Tech fully paid UMI for all project milestones under the Agreement up to and  
24 including milestone four. We also made payments to UMI for additional work pursuant to Article  
25 II of the Agreement. As of December 18, 2008, GSI Tech had paid UMI a total of \$542,400,  
26 which constituted full payment for all services performed by UMI to that point.

27 16. In late 2008, we learned through news reports that ProMOS was facing insolvency  
28 and seeking bailouts from the Taiwanese government. In light of ProMOS's apparent insolvency,

1 we questioned UMI about it and its parent company's ability to complete the project, which  
2 required manufacturing and testing of the LLDRAM Product at ProMOS's fab.

3 17. During the course of many meetings, phone conversations, and email  
4 correspondence between representatives of UMI, GSI Tech, and ProMOS, in or about December  
5 2008 through March 2009, we discussed and agreed that UMI could no longer proceed with the  
6 LLDRAM Project due to ProMOS' financial difficulties and potential insolvency. Because it was  
7 not possible to design in the ProMOS-Hynix environment and then port that design over to a  
8 different process technology, it made no economic sense to proceed with milestones 5 and 6 in  
9 accordance with the ProMOS design rules given its apparent insolvency. Indeed, the more than  
10 \$540,000 GSI Tech spent for the LLDRAM Product under the Agreement was largely wasted  
11 because GSI Tech determined that it would have to start over with a different fab using its unique  
12 design rules and processes.

13 I declare under penalty of perjury under the laws of the United States of America that the  
14 foregoing is true and correct. Executed this 26th day of March, 2013.

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17 Lee-Lean Shu  
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